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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,426	05/16/2006	Werner Lubitz	2923-746	8425
6449 7590 12/22/2008 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005				
EXAMINER SWARTZ, RODNEY P				
ART UNIT 1645		PAPER NUMBER		
NOTIFICATION DATE 12/22/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary

Application No.

10/567,426

Applicant(s)

LUBITZ, WERNER

Examiner

Rodney P. Swartz, Ph.D.

Art Unit

1645

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7 October 2008, 10 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-12, 14-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-12, 14-18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 7 October 2008 and 10 October, 2008 have been entered.
2. Claims 1-5, 7-12, 14-18 and 20 are pending and under consideration.

Rejections Maintained

3. The rejection of claims 1-5, 7-12, 14-18 and 20 under 35 U.S.C, second paragraph, indefiniteness, is maintained.

Applicant argues that the amendment of the claims obviates the rejection.

The examiner has considered applicant's argument, but does not find it persuasive.

Claim 4 is dependent from claim 1. Claim 1 recites that partners P1 are anchored to the lysis tunnel of the ghosts and partners P2 are anchored to the surface of the carrier. However, claim 4 recites that at least one partner of the bioaffinity binding pair is immobilized on the membrane of the bacterial ghosts "and" on the carrier material. Thus, claim 4 contradicts claim 1 in that claim 1 recites only P1 on the membrane and only P2"on the carrier, but claim 4 recites that: 1) a P1 must be on both the membrane and carrier, or, 2) a P2 must be on both the membrane and carrier. Thus, it is unclear what formation is properly claimed by claim 4. Claim 5 depends from claim 4, but does not clarify the issue.

Claim 9 depends from claim 1, and recites that the carrier material employed "is" lipid "vesicles". It is unclear what is being claimed because of the use of the singular "is" and the plural "vesicles" in describing the carrier material. Claim 10 and 11 depend from claim 9, but do not clarify the issue.

Claim 15 depends claim 14 which depends from claim 1. Claim 15 is a closed bacterial ghost which can be obtained from the method of claim 1, characterized in that it comprises a membrane which is "at least partially intact". Because claim 1 now recites closure of a "lysis tunnel", it is unclear how produces a complete ghost if one has only a small part of the membrane.

As newly amended, claim 1 is recites that a bacterial ghost exhibiting a lysis tunnel can be closed by having a plurality of P1 partner anchored on the membrane of the ghosts and having a plurality of P2 partner anchored on carrier materials, which results in closure by way of a P1-P2 interaction. The claim then recites that "said partners of type (P1) are anchored to the lysis tunnel". It is unclear where all of the P1 partners are placed, on only the lysis tunnel or all over the membrane. If all over the membrane, it is unclear how one closes the ghost if the P1-P2 interaction occurs at a P1 position on the membrane other than at the lysis tunnel. Claims 2-5, 7-12, and 14-18 are dependent claims, but do not clarify the issue.

Newly amended claims 20 now recites that a bacterial ghost exhibiting a lysis tunnel can be closed by having a plurality of P1 partner anchored to the membrane and to the carrier material, and having a plurality of P2 partner present in free form, which results in closure by way of a P1-P2-P1 interaction. The claim then recites that "said partners of type (P1) are anchored to the lysis tunnel and to the surface of said carrier materials to mediate closure". It

is unclear where all of the P1 partners are placed, on only the lysis tunnel or all over the membrane.

Conclusion

4. No claims are allowed.
5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rodney P. Swartz, Ph.D., Art Unit 1645, whose telephone number is (571) 272-0865. The examiner can normally be reached on Monday through Wednesday from 9:00 AM to 7:30 PM EST. Thursday is the examiner's work at home day.

If attempts to reach the Examiner by telephone are unsuccessful, please contact the Examiner's Supervisor, Robert B. Mondesi (571)272-0956.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Rodney P. Swartz, Ph.D./

Primary Examiner, Art Unit 1645

December 10, 2008

Application Number**Application/Control No.**

10/567,426

**Applicant(s)/Patent under
Reexamination**

LUBITZ, WERNER

Examiner

Rodney P. Swartz, Ph.D.

Art Unit

1645